

[Translation]

### Additional Power Generation Capacity

302. SHRI AMAR PAL SINGH : Will the Minister of POWER be pleased to state :

(a) the target fixed for the additional power generation capacity in terms of thousand Megawatt for Ninth Plan;

(b) whether there is a proposal to make the constitution of Power Regulatory Board in States compulsory so that the rates of power in the States be kept atleast at the level which do not adversely affect the financial position of power sector;

(c) if so, the details thereof; and

(d) the time by which a final decision is likely to be taken in this regard ?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGINDER K. ALAGH) : (a) The Capacity Addition Programme for the Ninth Five Year Plan is under finalisation by the Planning Commission.

(b) to (d) In accordance with Common Minimum National Action Plan for Power adopted after extensive consultations with States Governments, the Government of India is examining the issue of setting up of Central Electricity Regulatory Commission and State Electricity

Regulatory Commissions (SERCs) enabling fixation of tariffs in an optimal and transparent manner.

[English]

### Subsidies for Renewable Energy Projects

303. PROF. P.J. KURIEN : Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) the details of subsidies available for renewable energy projects;

(b) the total quantum of energy produced so far in the country; and

(c) the target fixed for the last financial year and the level of achievement made ?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (CAPT. JAI NARAYAN PRASAD NISHAD) : (a) The details of subsidies available under various renewable energy programmes of the Ministry of Non-Conventional Energy Sources, are given in attached Statement-I.

(b) The total capacity of various renewable energy projects, systems and devices installed so far in the country, as on 31st March, 1997, is given in attached Statement-II.

(c) The details of target fixed for the last financial year and the level of achievement made, is given in attached Statement-III.

### Statement-I

#### Subsidies available under various programmes of the Ministry of Non-Conventional Energy Sources

Sl.No.	Programme	Subsidies available from the Ministry
1	2	3
<b>1. Biomass Combustion-based Power :</b>		
(i)	Capital Subsidy for Taluka level biomass based power plants (1 MW and above) in Co-operatives/State/Joint sector preferably with the involvement of NGOs (Under Demonstration Scheme).	Rs. 1.0 crore per MW. Subject to a maximum of Rs. 10 crores per project.
(ii)	Interest Subsidy for Biomass Combustion-based Electrical Power Plants for captive Biomass Projects (2 MW & above).	Maximum of Rs. 30 lakh per MW
(iii)	Interest subsidy for Biomass combustion based	Maximum of Rs. 45 lakh per MW.

1	2	3
	Electrical Power Plants for field based Biomass Projects (2 MW & above).	
2.	<b>Bagasse based Co-generation :</b>	
(i)	Capital Subsidy in Co-operatives/Public/Joint Sector Sugar Mills (Under Demonstration Schemes).	Rs. 2 crores/MW of surplus power comprising of Rs. 70 lakh/MW of subsidy subject to maximum of Rs. 6 crores per project and balance as soft loan at 9% annual rate of interest.
(ii)	Capital Subsidy in other Sugar Mills (Under Demonstration Schemes).	Rs. 70 lakh/MW subject to a maximum of rs. 6 crores/project.
(iii)	Interest Subsidy for Projects of 1-4 MW surplus power generation capacity.	Maximum of Rs. 15 lakh/MW of surplus power fed into the grid.
(iv)	Interest Subsidy for Projects of more than 4 MW surplus power generation capacity.	Maximum of Rs. 35 lakh/MW of surplus power fed into the grid.
3.	<b>Small Hydro Power :</b>	
(i)	Capital Subsidy for Small Hydro projects executed by State Nodal Agencies/State Government Departments in the North-Eastern States.	Up to Rs. 3 crores/MW or 50% of the cost of the project, whichever is lower.
(ii)	Capital Subsidy for Small Hydro Projects upto 100 KW capacity executed by State Nodal Agencies/State Government Departments/NGOs/Local bodies in Hilly Regions and Andaman & Nicobar Islands; and by NGOs, Local Bodies, Local Communities in the North-Eastern Region.	@ Rs. 15,000/- per KW.
(iii)	Capitalised Interest Subsidy for Small Hydro Power Projects in Hilly Areas. North-Eastern States and Andaman & Nicobar Islands.	Upto Rs. 1.12 Crores per MW
(iv)	Capitalised Interest Subsidy for Small Hydro Power Projects in other regions.	Upto Rs. 18.30 lakhs per MW
(v)	Assistance for Survey and Investigation.	100% of the cost Subject of a maximum of Rs. 1.5 lakh.
(vi)	Assistance for DPR Preparation.	50% of the cost subject to a maximum of Rs. 1 lakh per DPR
(vii)	Subsidy for the development and upgradation of water mills.	
	(a) Mechanical output.	Upto Rs. 30,000/-
	(b) Mechanical and electrical output.	Upto Rs. 60,000/-
4.	<b>Solar Photovoltaic Grid-connected Power Project for niche applications namely voltage support systems at the tail-end of the grid in rural areas and peak-sharing systems in Urban Centres :</b>	2/3 <sup>rd</sup> of the project cost subject to a maximum of Rs. 2 crores per 100 KW.

1	2	3
<b>5. Solar Thermal Systems :</b>		
Interest Subsidy through IREDA and selected Banks to provide soft loans to users.		
(a) For domestic users and non-profit making institutions.		5% annual rate of Interest.
(b) For commercial users		8.3% annual rate of Interest.
<b>6. Solar Cookers :</b>		
Loans available to bulk users through IREDA and to individual user through selected Banks.		Interest free
<b>7. Solar Photovoltaic Systems :</b>		
(i) Domestic Lighting Systems		50% of ex-works cost subject to a maximum of Rs. 6,000/- per system.
(ii) Street Lighting systems :		50% of ex-works cost subject to Rs. 12,000/- per system.
(iii) Small Solar PV Power Plants :		50% of ex-works cost subject to a maximum of Rs. 2.0 lakh per Kwp.
(iv) Solar Lanterns		Rs. 1,500/- per Solar Lantern.
(v) Solar PV Pumps		(a) Subsidy of Rs. 125 per peak Watt subject to a maximum of Rs. 1,50,000/- per system; and (b) Loan of Rs. 50,000/-, to 1,00,000/- depending on size of Solar PV array & capacity of Pump, at 5% annual rate of interest.
<b>8. Wind Pumps :</b>		Rs. 16,000-32,000 per Wind Mill depending on design of Wind Mill.
<b>9. Wind Battery Chargers :</b>		80% of ex-works cost.
<b>10. Energy from Urban, Municipal : and Industrial Wastes.</b>		
(i) Capitalised Interest Subsidy,		upto 10% of the loan amount subject to a maximum of Rs. 1.0 crore/MW
(ii) Investment Subsidy		50% of the direct equity stake of the promoter in the project cost, subject to a maximum of Rs. 1.0 crore/MW
(iii) Assistance for the preparation of Detailed Project Report (DPR) Techno-Economic Feasibility Report (TEFR).		50% of the cost. subject of a maximum of Rs. 2 lakh
(iv) Assistance for site clearance/facilitation to Municipal Corporation/Urban Local Bodies.		Rs. 15 lakh per MW (equivalent).
(v) Assistance for site clearance/facilitation to State Nodal Agencies and/or other Appropriate Agencies.,		Rs. 5 lakh per MW (equivalent)

1	2	3
(vi)	Financial Support for Innovative Demonstration Projects.	Upto 50% of the project cost, subject to a maximum of Rs. 3.0 crore per MW.
(vii)	Financial Support for carrying out the assessment of Waste for Energy Recovery.	100%
(viii)	Financial Support for mounting Energy and Resource Recovery Components in the Sewage Treatment Plants.	50% of the cost.
<b>11. Biomass Gasification :</b>		
(i)	Biomass Gasification for Thermal Applications.	30% of the cost.
(ii)	Biomass Gasification for both Mechanical and Electrical applications.	60% of the cost.
(iii)	Biomass Gasifier Systems for Community/Institutional cooking in :	
	(a) Scheduled Castes/Scheduled Tribes Schools Hostels,	75% of the cost.
	(b) Government hostels, charitable trusts, and Mess Rooms of the Army, and the Para-Military forces.	50% of the cost.
(iv)	Biomass Gasifier for Village Electrification.	75% of the project cost.
	(b) Interest subsidy for Biomass Briquetting Units	Upto 10%
<b>12. Biogas Plants :</b>		
(i)	Family Type Biogas Plants (1-10m <sup>3</sup> capacity per day)	Rs. 2,000/- to 5,000/- per plant.
(ii)	Community biogas Plant (15-85m <sup>3</sup> Capacity per day)	Rs. 44,000/- to 2,00,000/- per plant.
(iii)	Institutional Biogas Plants (15-85m <sup>3</sup> capacity per day)	Rs. 15,000/- to 150,000/- per plant.
(iv)	Night Soil based Biogas plants (15-60 m <sup>3</sup> Capacity per day)	Rs. 70,000/- to Rs. 8,00,000/- per plant.
<b>13. Improved Chulhas</b>		
(a)	Fixed Chulha	
	(i) Without Chimney	Rs. 20/- per chulha
	(ii) With Chimney	Rs. 40/- per chulha
(b)	Portable Chulha	Rs. 40/- per chulha for general category; Rs. 50/- per chulha for Scheduled Castes/ Scheduled Tribes; Rs. 75/- per chulha for North-Eastern States, Sikkim and Jammu & Kashmir.
(c)	High Altitude Chulha	Rs. 250/- per chulha subject to a maximum of 50% of the cost.
<b>14. Battery Powered Vehicles</b>		50% of the cost excluding excise duty. Sales tax, etc.

**Statement-II**

*Total installed capacity of various renewable energy systems and devices in the country*

Source/Technology/ Applications	Unit	Installed capacity (upto 31.3.97)
1	2	3
1. Biogas Plants	Nos.	25 lakhs
2. Improved Chulhas	Nos.	257 lakhs
3. Biomass Gasifiers (Standalone)	MW	31
4. Solar Lanterns	Nos.	1,31,190
5. Domestic Lighting Systems	Nos.	52,330
6. Street Lighting Systems	Nos.	31,527
7. Community Lighting/TV Systems	Nos.	875

1	2	3
8. Solar Photovoltaic Power Plants (Stand-alone and Grid connected)	Nos./ Kwp	189/1510
9. Water Pumping Wind Mills	Nos.	263
10. Solar Thermal Systems	Sq. m. collector area	3,80,000
11. Solar Cookers	Nos.	4,34,754
12. Small Hydro Power	MW	144
13. Wind Power	MW	900
14. Biomass based Power	MW	84
15. SPV Water Pumping Systems	Nos.	2,153

**Statement-III**

*Programme-wise targets and achievements during the year 1996-97*

S.No.	Name of the Programme	1996-97	
		Target	Achievement
1		2	3
<b>Rural Energy</b>			
1.	Family Size Biogas Plants (lakh)	1.65	1.70
2.	CBP/IBP/NBP (Nos.)	250	345
3.	Improved Chulha (lakhs)	25.00	29.30
4.	Biomass Gasifiers (Standalone) (MW)	4.00	6.00
5.	Renewable Energy Parks (Nos.)	70	8
<b>Solar Energy</b>			
6.	Solar Photovoltaic Programme		
	(a) Solar Lanterns (Nos.)	35,000	50,131
	(b) Domestic Lights (Nos.)	10,000	14,971
	(c) Street Lights (Nos.)	500	528
	(d) SPV Power Plants (Kwp) (Standalone)	50	84
7.	SPV Irrigation Pumps (Nos.)	1,000	610
8.	Solar Thermal Energy Programme (in m <sup>2</sup> collector area)	35,000	40,000
9.	Solar Cookers (Nos.)	25,000	26,000

1	2	3
10. Wind Pumps & Wind Battery Chargers (Nos./KW)	100/10	99/14
<b>Power Generation</b>		
11. Wind Power (MW)	100	169
12. Small Hydro Power (MW)	30.00	16.00
13. Biomass Power (MW)	55.00	37.00
(a) Biomass Co-generation (MW)	45.00	25.00
(b) Biomass Combustion based Power (MW)	10.00	12.00
14. Solar Photovoltaic Power (KW) (Grid connected)	250	300
15. Energy from Urban & Industrial Waste (MW)	10	3.7 (8.75*)
16. Alternate Fuels for Surface Transportation (Nos.)	200	13

\* Total Capacity sanctioned during 1996-97.

#### Assessment of Stone Reserved Areas

304. DR. KRUPASINDHU BHOI : Will the Minister of MINES be pleased to state :

(a) whether the Government have made any assessment of gold, diamond and different precious and semi-precious stone reserved areas on the Mahanadi basin and other places in Orissa;

(b) whether the extraction of these metals have not been done in that region in a systematic manner; and

(c) if so, the steps taken for the proper exploitation of these precious metals ?

THE MINISTER OF STEEL AND MINISTER OF MINES (SHRI BIRENDRA PRASAD BAISHYA) : (a) The Geological Survey of India (GSI) is conducting investigation for gold and precious/semi-precious stones in the Mahanadi basin and other parts of the State of Orissa.

(b) and (c) The geological investigation in the region is in preliminary stage and therefore, question of exploitation of these prospects does not arise.

#### Direct Rail Service from Mumbai to Hubli

305. SHRI SHIVANAND H. KOUJALGI : Will the Minister of RAILWAYS be pleased to state :

(a) whether the Government propose to introduce direct rail service between Mumbai and Hubli; and

(b) if so, the steps taken/proposed to be taken by the Government in this direction stating the period by which

such rail service is likely to be introduced ?

THE MINISTER OF RAILWAYS (SHRI RAM VILAS PASWAN) : (a) and (b) At present, there is no proposal for introduction of a direct train between Mumbai and Hubli. However, 1017/1018 Mumbai CST-Bangalore Express already provides a direct service between Mumbai and Hubli on 4 days in a week.

[Translation]

#### Modernisation of SEBs

306. SHRI PAWAN DIWAN : Will the Minister of POWER be pleased to state :

(a) whether there is any proposal to provide assistance for streamlining and modernisation of State Electricity Boards;

(b) whether any efforts have been made for the proper monitoring of the expenditure being incurred by the State Electricity Boards; and

(c) if so, the details thereof and if not, the reasons therefor ?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGINDER K. ALAGH) : (a) The Government has finalised a Common Minimum National Action Plan for Power based on the consensus reached at the Chief Ministers' Conferences held on 16.10.1996 and 3.12.1996. The Action Plan provides for autonomy to the State Electricity Boards.